

[illegible]

A virtual record manager and a data exchange engine are provided for dynamically defining data records in a database and for dynamically allocating instances of defined data records. These components are capable of mediating between the database and application and client interface layers to facilitate exchange of information over a network. Embodiments are configured to allow complex data records having a plurality of related fields, and to allow management and exchange of information at both the data field level and data record level.